

REMARKS/ARGUMENTS

I. Introduction:

The courteous telephone interview granted applicants' undersigned attorney by Examiner Ranodhi Serrao on January 9, 2007 is hereby respectfully acknowledged. The arguments set forth below were presented to the Examiner in the Interview.

II. Claim Rejections – 35 U.S.C. 102 and 103:

Claims 1, 4, 5, and 7 stand rejected under 102(e) as being anticipated by U.S. Patent Publication Nos. 2002/0172149 (Kinoshita et al.).

The Kinoshita et al. patent is directed to a method and apparatus for protection path setup. Bandwidth is shared among protection paths only if there is no possibility that any of the protection paths will be used simultaneously. In the previous Office Actions, the Examiner stated that Kinoshita et al. fail to teach "wherein said bandwidth to be protected of said link pair comprises a lesser of primary bandwidths of links of said link pair." (See, for example, paragraph 9 of the final Office Action dated March 31, 2006).

In the Office Action dated September 14, 2006, the Examiner states that Kinoshita et al. contain all of the limitations of claims 1, 4, 5, and 7. More specifically, the Examiner cites paragraph [0163] with respect to the above limitation. This section of the Kinoshita et al. patent describes how a protection path setup procedure is initiated upon receipt of a working path reservation message. A resource control section indexes a bandwidth management table 100 (Fig. 32) to check to see if a bandwidth requirement can be met. The required bandwidth is checked against the unused bandwidth. The bandwidth requirement in the example is 10 Mbit/s, which is the bandwidth requirement from node A to node E (paragraph [0157]). There is no discussion of comparing bandwidths of links traversing a node or selecting the bandwidth to be protected as a

lesser of the bandwidths of the links. Kinoshita et al. thus do not disclose using a bandwidth to be protected of a link pair that comprises a lesser of primary bandwidths of links a link pair traversing a node to be protected, as set forth in the claims.

Accordingly, claim 1 is submitted as not anticipated by Kinoshita et al.

Claims 3-7, depending from claim 1 are also submitted as patentable for at least the same reasons as claim 1.

Claims 16 and 25 are submitted as patentable for the reasons discussed above with respect to claim 1.

Claims 3 and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. in view of U.S Patent Publication No. 2002/0067693 (Kodialam et al). As discussed in previous responses, applicants submit that Kodialam et al. do not overcome the deficiencies of the primary reference.

Claims 8 and 9 stand rejected under 35 U.S.C 103(a) as being unpatentable over Kinoshita et al. and U.S. Patent Application Publication No. 2003/0009582 (Qiao et al.). Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Qiao et al. and Kinoshita et al. in view of Kodialam et al.

The Qiao et al. patent is directed to distributed information management schemes for dynamic allocation and de-allocation of bandwidth. In rejecting the claims, the Examiner refers to paragraph [0062] of Qiao et al. This section of the patent refers to equations used to minimize the total bandwidth consumed to satisfy a new connection request. The equations define limitations for a linear programming formulation. The first equation states the constraint that the same link cannot be used by both active and backup paths. The second and third equations state that the new backup path can share the amount of bandwidth already reserved on a link. For example, equation (ii) specifies that no additional bandwidth needs to be reversed on the link if the amount of bandwidth needed for the new link is less than or equal to the amount of bandwidth already reserved on the link.

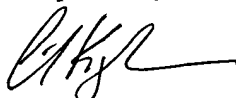
Qiao et al. do not show or suggest establishing backup tunnels by signaling backup tunnels with zero bandwidth to adjacent nodes of each protected node. As described above, the equations referred to by the Examiner provide constraints for a linear program used to minimize bandwidth for a new connection request. There is no suggestion in Qiao et al. of establishing a backup tunnel with zero bandwidth.

Accordingly, claims 8, 12, 15, 21, and 30, and the claims depending therefrom, are submitted as patentable over the cited references.

III. Conclusion:

For the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



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